AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-29. (canceled)

30. (previously presented) A solid state image sensor comprising:

a semiconductor substrate having an imaging area and a peripheral area;

a plurality of shift register electrodes formed on said imaging area with a first gap between adjacent ones of said shift register electrodes, each of said shift register electrodes being elongated over said peripheral area, a plurality of peripheral electrodes being thereby formed on said peripheral area with a second gap between adjacent ones of said peripheral electrodes;

a first insulating layer covering said shift register electrodes and filling said first gap, said first insulating layer having a first thickness over an upper surface of each of said shift register electrodes; and

a second insulating layer covering said peripheral electrodes and filling said second gap, said second insulating layer having a second thickness over an upper surface of each of said peripheral electrodes, said second thickness being larger than said first thickness.

31. (previously presented) The solid state image sensor as claimed in claim 30, wherein said first insulating layer includes first and second insulating portions, the first insulating portion filling said first gap to a level of said upper surface of each of said shift register electrodes and said second insulating portion being formed on said first insulating portion and said upper surface of each of said shift register electrodes, and said second insulating layer includes third and fourth insulating portions, said third insulating portion filling said second gap and being extended over said upper surface of each of said peripheral electrodes and said fourth insulating portion being formed on said third insulating portion.

32. (previously presented) The solid state image sensor as claimed in claim 31, wherein said second insulating portion has said first thickness, said third insulating portion having a third thickness over said upper surface of each of said peripheral electrodes, and said fourth insulating portion having said first thickness to thereby cooperate with said third insulating portion to provide said second thickness.

33. (previously presented) The solid state image sensor as claimed in claim 31, wherein said first and third insulating portions include thermally reflowable material.

34. (currently amended) The solid state image sensor as claimed in claim 33, wherein said thermally reflowable material is

~~Boro-Phospharas-Silicate-Glass~~ Boro-Phosphorous-Silicate-Glass (BPSG).

35. (previously presented) The solid state image sensor as claimed in claim 30, wherein a width of said second gap is longer than a width of said first gap.

36. (currently amended) The solid state image sensor as claimed in claim 30, wherein said plurality of shift register electrodes functions as a plurality of vertical and horizontal shift register electrodes, one of said plural shift register electrodes functions as either a vertical shift register electrode or a horizontal shift register electrode.

37. (previously presented) The solid state image sensor as claimed in claim 31, further comprising a plurality of photoelectric conversion elements formed in said imaging area, said second insulating portion extended over said plurality of photoelectric conversion elements, an upper surface of said second insulating portion over each of said plurality of photoelectric conversion elements being lower than said upper surface of each of said plurality of shift register electrodes.

38. (previously presented) The solid state image sensor as claimed in claim 30, further comprising a light shielding metal layer provided on said first and second insulating layer, said light shielding metal layer serving as interconnects for making electrical connection to said plurality of peripheral electrodes.

39. (previously presented) The solid state image sensor as claimed in claim 36, wherein said plurality of vertical and horizontal shift register electrodes is made from a single layer of conductor.

40. (withdrawn) The solid state image sensor as claimed in claim 36, wherein each of said vertical and horizontal shift register electrodes has a silicide layer at a surface portion of each of said vertical and horizontal shift register electrodes.